1989 APRIL

SPECIAL TENTH ANNIVERSARY ISSUE

APR. 1989
$3.00

inc.®

COMING OF AGE

How the Events of the Past Decade Have Changed the Way We Think About Business

PLUS

ENTREPRENEUR OF THE DECADE

An Interview with Steve Jobs

CONTRIBUTORS:

David Halberstam
Michael Kinsley
Anne Robinson
Yvon Chouinard
David Liederman
Philip Crosby
John Sculley
Regis McKenna
Paul Hawken
Dan Bricklin
Ken Iverson
Donald Burr
Tracy Kidder
Ben Cohen
Bill Gates
Tom Peters
David Birch
Ned Johnson
Bill McGowan
Sandra Kurtzig
Phillip Moffitt
Allen Neuharth
Allan Kennedy
Charlie Leighton
Harry Quadracci
Robert Reich
Robert Noyce
Fred DeLuca
Fred Smith

0 884265 7 04
02748

•1445*******CAR-RT SORT**CR24
•RBI74ODA090•
46054I RBI T4ODA094
SELMA W RUBIN
BETHESDA PUBL LIB
7400 ARLINGTON RD
BETHESDA MD 20814

0440
JUN 90
MIAT
•VZ

APRIL 1989 VOL. 11 NO. 4

CONTENTS

SPECIAL TENTH ANNIVERSARY ISSUE: COMING OF AGE

11 Letter from the Founder *BY BERNARD A. GOLDHIRSH*
Why starting INC. magazine seemed like such a good idea—and still does

38 Coming of Age *BY DONALD BURR, WILLIAM GATES, DAVID HALBERSTAM, PAUL HAWKEN, REGIS McKENNA, JOHN SCULLEY, FREDERICK W. SMITH, AND MANY OTHERS*
How the events of the past decade have changed the way we think about business

82 Doubting Thomas *BY TOM PETERS*
Confessions of a big-company man

97 My Favorite Company *BY THE INC. STAFF*
The companies we've most enjoyed writing about

108 Dream Team *BY MICHAEL S. HOPKINS*
INC.'s start-up all-stars

114 The Entrepreneur of the Decade
An interview with Steve Jobs

131 With a Little Help from His Friends *BY JOHN CASE*
These days a long-shot start-up doesn't have to go it alone

220 Then and Now
Interesting facts and figures about the changing economy

COLUMNS

33 The New Economy: Competitive Advantage. *BY JOHN CASE*
The entrepreneurial boom of the '80s grew out of profound market changes in the '70s. So what can we expect in the '90s?

165 Marketing: Looking Out for Number One. *BY PAUL B. BROWN*
Being the industry leader is the best marketing edge you can get, as long as it doesn't cost too much

169 Managing People: Hiring the Best. *BY BRUCE G. POSNER*
You can't eliminate mistakes in hiring, but you can work to improve the odds

173 Capital: Working for the Union. *BY ELLYN E. SPRAGINS*
Soon you may be able to get your capital from the same place that venture capitalists do—pension funds

177 Selling: Come Again. *BY TOM RICHMAN*
By concentrating on attitude and follow-up, one company turns browsers into repeat customers

182 The Law: Victims' Rights. *BY MARISA MANLEY*
Frivolous litigation is on the rise. Here's how to defend yourself against it

185 Executive Software: Managing Your Stock Portfolio. *BY PAUL A. STRASSMANN*
With today's software, it's not so hard to become your own financial adviser

DEPARTMENTS

15 Letters: Perot as Hottest Entrepreneur; making it in America; and defining a small business

25 Insider: Hotline; New Businesses; a company that competes against itself

162 Hands On: Tips on finding capital; managing people; and innovation

218 Investing in Growth Companies/Street Talk: The advantages of being long

INC. COVER STORY

114 Steve Jobs
The Entrepreneur of the Decade

38 Coming of Age
Doing business in the entrepreneurial age

131 Greg Braendel
Finding unexpected sources of help

COVER PHOTOGRAPH
by
Ed Kashi

COMPETITIVE ADVANTAGE

The entrepreneurial boom of the '80s grew out of profound market changes in the '70s. So what can we expect in the '90s?

BY JOHN CASE

When I studied economics in college—this was 25 years ago—I learned about those perfectly competitive markets economists are so fond of. I also learned about the huge corporations that, by dominating their industries, had all but eliminated effective competition in much of the real world. The giants, pointed out theorists such as Harvard's John Kenneth Galbraith, jostled with one another for a point or two of market share. But they set their own prices, managed the demand for their products, controlled their suppliers and distributors. To say they were governed by free-market competition was to stretch the concept beyond recognition.

How could the past decade's entrepreneurial explosion have occurred in so thoroughly managed a marketplace? The answer, of course, is that it didn't, and thanks to the work of University of Massachusetts at Amherst economist William G. Shepherd we know why not. By 1980 the American economy had undergone a series of changes that rendered the Galbraithian model obsolete. Shepherd's accomplishment was measuring how much difference those changes made.

COMPETITION IN THE U. S. ECONOMY
'Managed' competition
48%
44%
23%
Source: William G. Shepherd, "Causes of Increased Competition in the U.S. Economy, 1939-1980," The Review of Economics and Statistics, November 1982.

Over three-quarters of the nation's output in 1980 was produced under true competitive conditions, up from half in 1939 and 1958.

SCOTT MACNEIL

Galbraith's model rested on what economists call institutional analysis—that is, sector-by-sector scrutiny of the way individual industries actually functioned. Autos were dominated by the Big Three, steel by U.S. Steel, detergents by Procter & Gamble and Colgate-Palmolive. Two massive studies, Shepherd knew, had determined that about half the U.S. economy fit this model of what might be called managed competition, while the other half was considerably more freewheeling. But the 1970s were a decade of turmoil, with imports invading major markets and trends such as deregulation beginning to affect whole industries. In that turmoil, Shepherd found himself wondering if the underlying structure of the economy was shifting.

The only way to answer the question was through yet another massive study, breaking the economy into its component parts and figuring out what, if anything, had changed. Was General Motors or P&G facing new competition? Was the structure of the banking industry somehow different in 1980 from what it had been in 1960? Shepherd, who had studied such matters for much of his career, collected government reports, industry analyses, and research monographs; he studied antitrust cases and combed the business press.

Then he plunged in, sifting through information on literally hundreds of industries. *Automobiles.* Once a prototype for Galbraith's arguments, it was now effectively competitive, thanks to a rise in imports from less than 10% of shipments in 1967 to about 25% in 1980. *Banking.* The rise of money-market funds and the subsequent deregulation of financial services had led to a sharp increase in competition. *Breakfast cereals.* No change here: it was utterly dominated, as it had been for decades, by Kellogg and its colleagues. Using benchmarks such as the market share controlled by the top four companies in an industry, Shepherd assigned each sector a number from one to four, indicating the degree of competition. Then he weighted the sectors by their share of national income and compared his totals with previous studies.

The results: where researchers studying data from both 1939 and 1958 had found about half the nation's output produced under true competitive conditions, Shepherd now upped that estimate to over three-quarters. *Office copiers.* Once dominated by Xerox, the industry was transformed by the arrival of imports in the 1970s. *Automotive rentals.* Cozy arrangements involving the three largest companies' airport locations were the subject of a major antitrust action, thus opening the field to new competitors. *Railroad transportation.* Deregulated in 1976 and 1980, its routes and rates were suddenly up for grabs.

Overall, the conclusion was inescapable. "The U.S. economy experienced a large and widely spread rise in competition during 1958–80," Shepherd wrote in the prestigious *Review of Economics and Statistics* for November 1982. "It can now be viewed as a large laboratory case, in which the effects . . . of pervasive competition will be tested for the next decade or two."

In retrospect, we can see one such effect clearly: drastic shrinkage in many big companies' market share, coupled with a quick, dramatic rise in entrepreneurship. Some of the linkages are obvious, such as the proliferation of rental-car companies following the antitrust case. Others are less visible but no less significant. Challenged by Toyota and Nissan, Detroit turned its attention to cost control, laying off tens of thousands of workers and relying heavily on outsourcing. That set the stage for the hundreds of growing companies now supplying the auto industry. Entrepreneurship was a cause as well as an effect of increased competition. Every stage in the growth of the microelectronics industry, for example—from the devel-

BID ALERT

Government Purchasers Across America Want Your Bids.

And now you have quick access to *live* sales opportunities with *thousands* of State, Local and Federal government purchasers *nationwide*.

See more bids. See bids from purchasers who are ready to buy what you sell.

Get a jump on the competition. The information you need can be rushed electronically right to your desk.

Concentrate on winning bids, not on looking for them.

- *See bids faster with BidNet.*
- *See more bids for what you sell.*
- *Streamline your bidding process.*
- *Compete more effectively!*

For Your FREE Bid Opportunity Analysis

And to learn more about BidNet

Call Toll-Free 1-800-325-6871 ext. 404

(In Maryland, 301-330-7000 ext. 404)

Mail Coupon To:

BidNet

a company of The Dun & Bradstreet Corporation

5 Choke Cherry Road
Rockville, MD 20850-4030

INC 404

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ STATE ____ ZIP _____

BUSINESS PHONE (____) _____

Some fast talk on lung disease.

Your lungs are an incredible piece of machinery. But your lungs are also incredibly delicate. Chronic bronchitis. Emphysema. Lung cancer. Asthma. Tuberculosis. All these diseases prey upon the lungs. Even the air you breathe at home or work can be the cause of lung damage. But the American Lung Association is battling *all* these lung diseases. For your lungs' sake, join the fight.

—John Moschitta, the fast talker.

TAKE CARE OF YOUR LUNGS. THEY'RE ONLY HUMAN.

AMERICAN LUNG ASSOCIATION
The Christmas Seal People ®

Space contributed by the publisher as a public service.

opment of the transistor to the latest applications software—was pioneered by upstart companies. Despite its size, IBM has never been able to relax.

Will the trend continue? As Shepherd's study suggests, that depends to some extent on changes in competitive conditions, which are difficult to assess in the absence of another major study. Nevertheless, Shepherd himself, now 52, says he believes the economy is just about as competitive today as it was a decade ago, and most businesspeople would agree. So can we expect the entrepreneurial boom of the '80s to carry on into the next decade? Not necessarily. A *continuing* high level of

Can we expect the entrepreneurial boom of the 1980s to carry on into the next decade? Not necessarily.

competition is not the same as an *increase* in the level of competition.

What happened in the '70s was that markets were destabilized—some by new technologies, others by deregulation or imports. That opened up all kinds of niches for growth-oriented company builders. Today, technology continues to change and to shake up the marketplace, thereby offering new opportunities. But a lot of U.S. industries have already reacted to the threat of imports or the opportunities of deregulation, and some are in the process of restabilizing. The clearest example is air transportation. A bevy of new airlines were created after deregulation in the late '70s. By now, most of them have been bought up or shaken out. The industry is moving toward the Galbraithian model, its three or four dominant players blithely increasing fares whenever they feel like doing so.

No one's predicting a wholesale return to the managed markets of the '60s, nor to the kinder, gentler competition they encouraged. But no one should expect as much turmoil—and therefore as much chance for entrepreneurship—as we experienced in the '70s. As Shepherd showed, that was a change of historic proportions. Today, we're more likely to slouch toward stability. And entrepreneurs will have to look harder and harder for niches conducive to growth. □

HANDS ON

A Manager's Notebook

CAPITAL

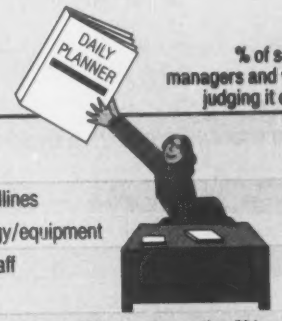
KEEPING THE VC DOOR AJAR

One of the hardest things about raising money from venture capitalists is getting in to see them. Business plans arrive on their doorsteps hourly, and with the market for new issues deader than John Travolta's career, they're not all that eager for deals.

"You can't call them daily—they don't want to deal with a pest. Yet you want to stay on their agendas," says Michael M. Nightingale, president and CEO of GMIS Inc., in Malvern, Pa., who has discovered a way to do just that.

Nightingale, whose company makes software for the health-care industry, keeps a file of every venture capitalist who has ever expressed even the vaguest interest in GMIS. "Whenever there's new information, we do a mailing," he says. Sending the letters makes it easier to get his calls returned, he says. It must be working: so far the company has raised more than $6 million. □

CUTTING OVERTIME



Technique to reduce overtime	% of surveyed managers and workers judging it effective
Plan more effectively	86.3%
Streamline procedures	59.1
Change schedules/deadlines	35.0
Acquire better technology/equipment	34.9
Hire more permanent staff	25.9
Hire temporary workers	25.3

About 65% of surveyed top managers said they work more than 50 hours a week. Responses to questions about how to control overtime indicate that at least some of the overtime reported by respondents is indeed making up for poor management. Only about one-fourth thought more staff would solve the problem.

Source: American Productivity & Quality Center, 1989

MANAGEMENT STRATEGY

HANGING ON TO THE REINS, IF NOT THE EQUITY

What most founders fear when it's time to raise money is losing control. The fear isn't groundless. Many entrepreneurs who sell a majority of their company's stock in order to bring in capital are later thrown out by investors when times get tough. Robert Ronstadt, CEO of Lord Publishing Inc., has a solution.

When Ronstadt became a minority shareholder in his Natick, Mass., software publishing company last year, he retained operational control by establishing a voting trust. He now owns 43% of Lord Publishing's stock, but controls 79% of its voting shares. Because the five trustees include Ronstadt, his wife, and another relative, he can heavily influence the entire bloc of its shares.

Ronstadt set up the trust for 20 years. But the important thing, he says, is that entrepreneurs protect their positions at least until their companies reach a period of stability, which he defines as 12 months of positive operational cash flow.

Ronstadt concedes that investors may demand more shares or a lower share price in return for giving up their voting rights. He argues that a voting trust is well worth this cost. "It's imperative that the lead entrepreneur maintains the management control to fulfill his vision for the company," he says. "The opportunity for Monday-morning quarterbacking is incredible." □

INCENTIVE PAY

SIMPLEST MAY BE BEST

Sometimes the more complicated an employee incentive system gets, the less rewarding it can seem. When Prime Technology Inc., a Grand Rapids, Mich., machine-tool distributor, wanted to reward nonsales employees and encourage them to stay with the company, CEO Phil Pachulski implemented a bonus plan that's as simple as they come.

For every hour employees work, Prime puts a dollar in their year-end bonuses. Each year's bonus includes the amount from previous years plus the current year's total, up to $5,000 in all. Normally an employee works about 2,000 hours per year. If a worker did so for two years, he or she would rake in a $4,000 bonus. In year three the employee would receive $5,000. The bonuses are built into the annual budget, and the company awards bonuses only in profitable years.

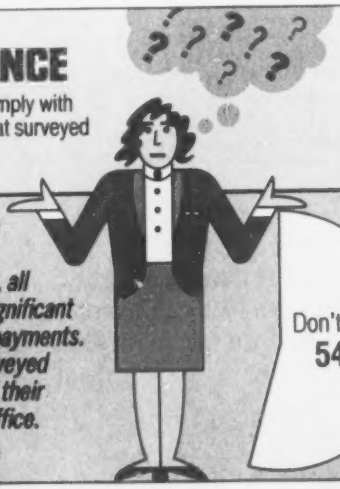
"It's easy to track, easy to explain, and easy to understand," Pachulski says. "We're trying to motivate people in advance—not look back on the year and say thanks." □

SECTION 89

BENEFIT PLAN COMPLIANCE

Does the documentation for your benefits plan comply with Section 89 qualification requirements? This is what surveyed employers believe:

Unless your benefit plans are in compliance with Section 89 requirements, all employees may suffer significant tax penalties on benefit payments. Yet more than half of surveyed employers didn't know if their documentation would suffice.



Source: Foster Higgins, Survey on Section 89 Non-discrimination Requirements, 1988

CHARTS: CYNTHIA DAVIS

HANDS ON

INNOVATION

ANSWERING THE BONUS QUESTION

A big problem with most employee-suggestion systems is that the financial rewards, if they exist at all, are unrelated to the value of the suggestions. Without much incentive to find better ways to do things, many employees lose interest in trying. Not so at Peavey Electronics Corp. The Meridian, Miss., company pays hourly workers 8% of the estimated first-year labor and materials savings that result from their ideas.

Peavey, which makes amplifiers and guitars, used to have a more conventional system, rewarding suggestions with $25 to $100 bonuses, vice-president Melia Peavey explains. Paying for savings instead, she says, generates more excitement.

For each suggestion, the company projects the savings in a cost study. Then it pays the employee his or her percentage up front—a minimum of $15, with no maximum. "We give them the benefit of the doubt," Peavey says.

Salaried workers aren't included in the program. "Saving money is part of their jobs," she says, "and we don't want supervisors competing with employees."

In 1988 hourly workers earned a combined total of $43,857 for their ideas. The biggest check—$1,331—went to a machinist who figured out how to reduce the amount of maple scrapped by the neck-carving machine. □

SOURCES OF
ENTREPRENEURIAL SATISFACTION

Source of satisfaction	Importance on scale of 1 to 10 (According to surveyed small-business owners)
Pride in product/service	8.7
Control	8.2
Freedom	8.1
Flexibility	8.1
Self-reliance	7.8
Customer contact	6.9
Income	6.8
Employee contact	6.3
Recognition	5.9
Privacy	5.9
Security	5.5
Status	5.2

Source: Cicco & Associates Inc., 1987

PUBLIC RELATIONS

LETTER QUALITY

Don't miss an easy opportunity to communicate what's important about your business on your company letterhead.

So says Tom Melohn, of North American Tool & Die Inc. (NATD), in San Leandro, Calif. Across the bottom of NATD's stationery is the statement: "0.1% Customer Rejects Since 1980." This concrete detail about the company's commitment to quality has more impact than an abstract company slogan, he believes.

When customers the company surveyed expressed their incredulity at NATD's low rejection rate, Melohn decided it was just the number that he wanted to keep in front of their eyes. □

RESOURCES

A GUIDE TO GIVEAWAYS

Going after government grants, loans, or business services can make finding a needle in a haystack seem easy. But Matthew Lesko can help.

Lesko has produced a 448-page tome called *Government Giveaways for Entrepreneurs*, a guide through the maze of government agencies. Free money, on-line databases, market research, expert advice, grants and loans are just a few of the offerings Lesko limns in a no-frills, well-indexed format designed for small businesses. Also included is a directory of bureaucrats paid to help you cut through red tape.

For more information, write Information USA Inc., P.O. Box 15700, Chevy Chase MD 20815; or call (301) 657-1200. The guide costs $29.95, plus $4 shipping. □

MANAGING PEOPLE

SOUNDING BOARD

Want to keep up with what your employees really think? Establish an employee sounding board, says Sally Tassani, founder of Tassani Communications Inc., in Chicago.

Tassani came upon the idea haphazardly. "There I was in a meeting with my key managers trying to figure out what employees wanted," she says. "I realized I should ask them myself. Boy, was I surprised." She learned in her first meeting with employees that a benefits package she had been agonizing over wasn't worth the effort. What they really wanted was more access, inspiration, and positive reinforcement from their managers. These were at least as important as a better bonus system.

"The meeting was so successful that I decided to do it on a regular basis," Tassani says. Now, she meets with a board of about 10 employees twice monthly.

To create the board, each department head recommended a nonmanagerial employee who has good communication skills and was caught up on work. The board even includes the company's clerical workers. "It eats up about an hour every other week, so I want the most efficient, bright, and capable employees," Tassani says. □

MARKETING

MAKING THE MOST OF MAILINGS

If you market by direct mail, you'd probably love to: (1) identify who reads your material, and (2) drop the prospects who never even open your brochure. Doug Hotchkiss, sales and marketing director of Overseas Adventure Travel Inc. (OAT), in Cambridge, Mass., thinks he has a way to do both.

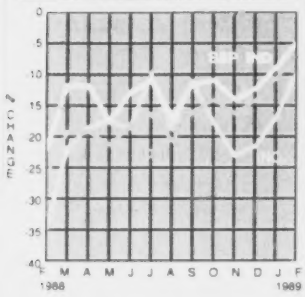
Last year OAT included a high-stakes contest in its mailing. In order to know about a trip to an exotic locale that the company was giving away—you could choose, say, Nepal or Peru—you had to at least open the six-page brochure. And in order to enter the contest, you had to answer six questions drawn from the brochure's text: for example, "Which nonfamily trip is the least difficult of our treks in Nepal?"

The trip cost the company as little as $1,800, Hotchkiss says, an insignificant expense compared with the $112,000 in printing and postage OAT saved by cleaning its mailing list of deadweight. Even better, those who entered the contest also had to answer questions about where they wanted to go and when: perfect fodder for OAT's salespeople. □

Reported by Paul B. Brown, Teri Lammers, Bruce G. Posner, Stephen D. Solomon, and Ellie Winninghoff

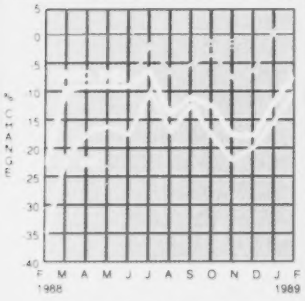
INVESTING IN GROWTH COMPANIES

INC. vs. CONSERVATIVE AVERAGES



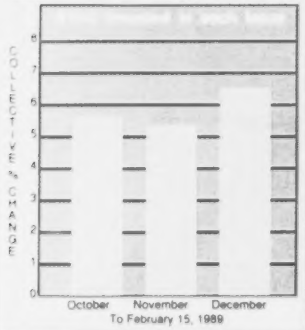
All averages start at 0 in October 1987

INC. vs. SPECULATIVE AVERAGES



All averages start at 0 in October 1987

IPOs IN THE AFTERMARKET



INITIAL PUBLIC OFFERINGS: JANUARY 1989

O-T-C sym.	Company	Business/product	Offering Size ($mil.)	Offering Price	First aftermarket bid	Underwriter
AMFB	American Federal Bank, FSB	Savings bank	10.00	5.00[c]	5	Keefe, Bruyette
AGT[a]	American Government Term Trust	Closed-end fund	70.00	10.00	10	Piper, Jaffray
AMNTU	American Network Group	Operates radio network	5.00	5.00[d]	5⅜	J. T. Moran
BPORU	Biopore	Dvlps. porous filtration membranes	6.00	6.00[e]	6½	D. H. Blair
FPT[a]	Franklin Principal Maturity Trust	Closed-end fund	177.00	10.00	10	Paine Webber
FSII	FSI International	Manufactures semiconductor products	10.88	7.50	7½	Piper, Jaffray
KMM[a]	Kemper Multi-Market Income Trust	Closed-end fund	204.00	12.00	12	Smith Barney
LGNDU	Legend's Co. of Chicago	Manufactures men's sportswear	3.00	4.00[f]	6¾	D. H. Blair
LYO[a]	Lyondell Petrochemical	ARCO subsidiary	960.00	30.00[g]	30⅛	Goldman, Sachs
TCA[b]	Thermo Cardiosystems	Dvlps. ventricular implants	15.30	8.50	8½	Shearson Lehman
VANF	Vanfed Bancorp	Savings bank	3.02	6.25[h]	6⅛	Dain Bosworth

Initial public offerings sold at $1 or less not included. First aftermarket bid is approximate. [a] trading on the NYSE; [b] trading on the AMEX; [c] 1,276 million of the 2 million shares were offered by subscription; [d] units of 3 common + 1 warrant; [e] units of 3 common + 3 warrants; [f] units of 4 common + 4 warrants; [g] 8 million additional shares were offered via subscription; [h] an additional 516,239 shares were offered overseas. Offering data source: *GOING PUBLIC: THE IPO Reporter*, a publication of The Dealer's Digest Inc., 150 Broadway, New York NY 10038

STREET TALK There's an arithmetic reason why it's better to be long in the stock market than short: you can never make more than 100% on the downside, while the profit potential of a long position is infinite. Concomitantly, you can lose only 100% of your investment on the long side, while the loss potential when a short goes wrong is infinite.

Over the years there have been actual situations in which short-sellers have been squeezed beyond their original capital commitment. That happens because in order to close a short position, you have to find stock to buy back in, and sometimes that's expensive if the outstanding shares are held by the corner's greedy architects. If some members of our investment community weren't so busy clipping prices on commodity futures and junk bonds, maybe they'd be baiting bears for sport.

As a redeeming condition for what short-side players give away—another concession is that short-side profit can never be considered a long-term gain for tax purposes—there's the empirical law that says markets fall faster than they rise. Shorts make their returns quickly and get out. That phenomenon can be seen in the accompanying charts (left), where what was undone in 3 months has taken 12 to repair.

The Street now pretty much considers Black Monday to be simply part of a bear market whose natural speed of descent was condensed severely. This, on a less dramatic scale, was called a shakeout in the old days—a sudden movement of shares from scared, weak hands to confident, strong holders, caused by rapidly falling prices. Such shakeouts were engineered by brazen money managers, often in individual issues. If only the rest of us had seen the Crash in that light at the end of '87. —*Robert A. Mamis*

CHARTS IMAGEBUILDER DESIGN

COPYRIGHT © 1989 BY GOLDHIRSH GROUP, INC. All rights reserved. Editorial and executive offices at 38 Commercial Wharf, Boston, MA 02110. INC. (ISSN 0162-8968) is published monthly by Inc. Publishing Company, 38 Commercial Wharf, Boston, MA 02110. Subscription rate for U.S. and Possessions, 12 issues $25. All subscription correspondence should be addressed to INC. magazine, P.O. Box 54129, Boulder, CO 80322-4129. Please allow at least six weeks for change of address. Include your old address as well as new, and enclose if possible an address label from a recent issue. Second class postage paid at Boston, MA, and additional mailing offices. Postage paid at Mississauga, Ontario. POSTMASTER: Send address changes to INC. magazine, P.O. Box 54129, Boulder, CO 80322-4129. Material in this publication must not be stored or reproduced in any form without permission. Requests for permission should be directed to Permissions Coordinator, INC., 38 Commercial Wharf, Boston, MA 02110. Inc. is a registered trademark of Goldhirsh Group, Inc.

APRIL 1989 VOL.11 NO. 4